Summary: *2013 Natural Gas Issues, Trends, and Outlook*

Natural Gas Working Group Stakeholders Meeting

Hearing Room A

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Report Background

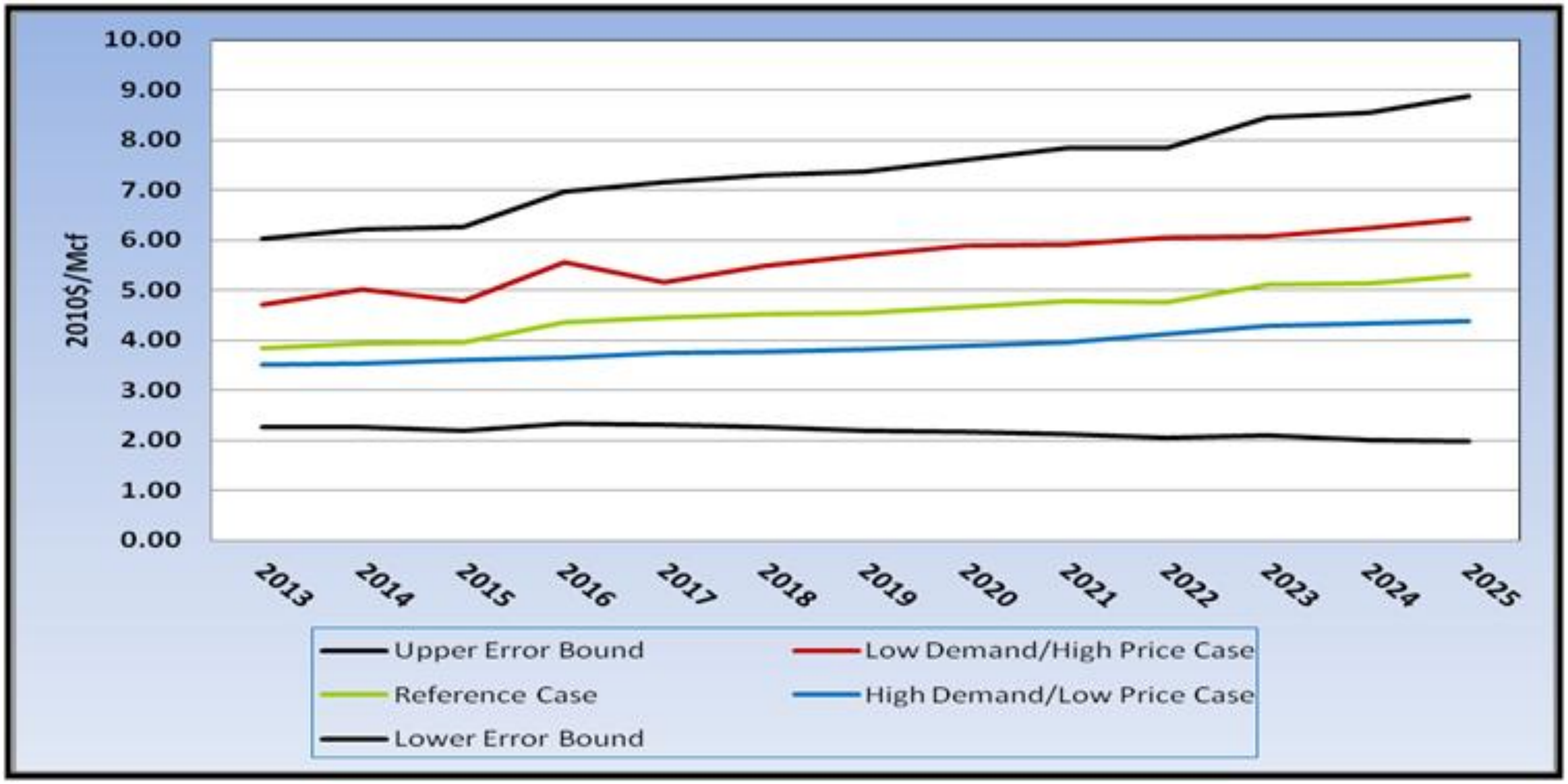
- Produced every other year in support of the Integrated Energy Policy Report (IEPR)
- Current natural gas issues and analysis of model results
- Three “common cases” were run in the NAMGas model on the Market Builder platform
  - Collaboration with Demand Forecast & Plexos Production Cost Model

Common Cases Assumptions

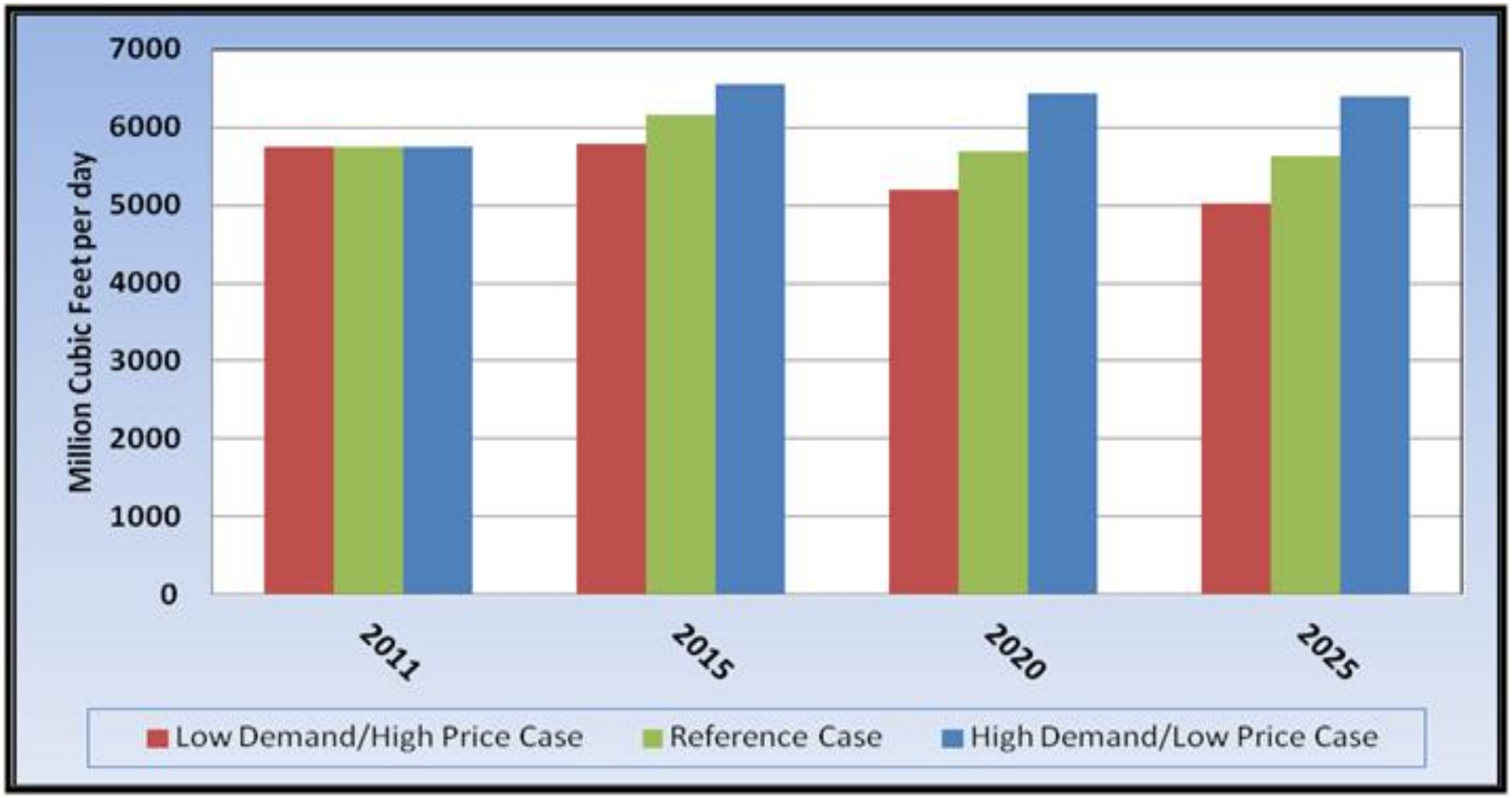
Assumptions	Reference Case	Low-Demand/High-Price Case	High-Demand/Low-Price Case
GDP Growth Rate	2.50%	3.00%	2.00%
Natural Gas Technology Improvement Rate	1%	1%	2.50%
CHP Demand (Bcf)/Capacity (MW) for CA in 2024[a]	83/1424	130/3084	14/210
Total U.S. Natural Gas Demand (Tcf/yr)			
2014	24.5	24.1	24.4
2019	28.4	27.9	27.2
2024	30.5	29.9	28.1
Maximum RPS Target			
CA Meets Target	On time	10 year delay	On time
WECC Meets Target	On time	10 year delay	On time
Other States Meet	5 year delay	10 year delay	On time
Additional U.S. Coal Generation Converts to Natural Gas Starting in 2014 (GW)	61	80	31
LNG Capacity Additions	No	Yes	No
Grow or Shrink Natural Gas Resource Available (U.S.)	N/A	Shrink by 5.5%	Grow by 5.5%
Additional Environmental Mitigation Cost (2010$/Mcf)	N/A	$0.50/Mcf Shale $0.30/Mcf Conventional	N/A
Additional Achievable Energy Efficiency[b]	Mid Savings Scenario	High Savings Scenario	Low Savings Scenario
Cost Environment[c]	Mid (P50)	High (P10)	Low (P90)

Natural Gas Prices to Increase Gradually

Common Case Price Results (Henry Hub)

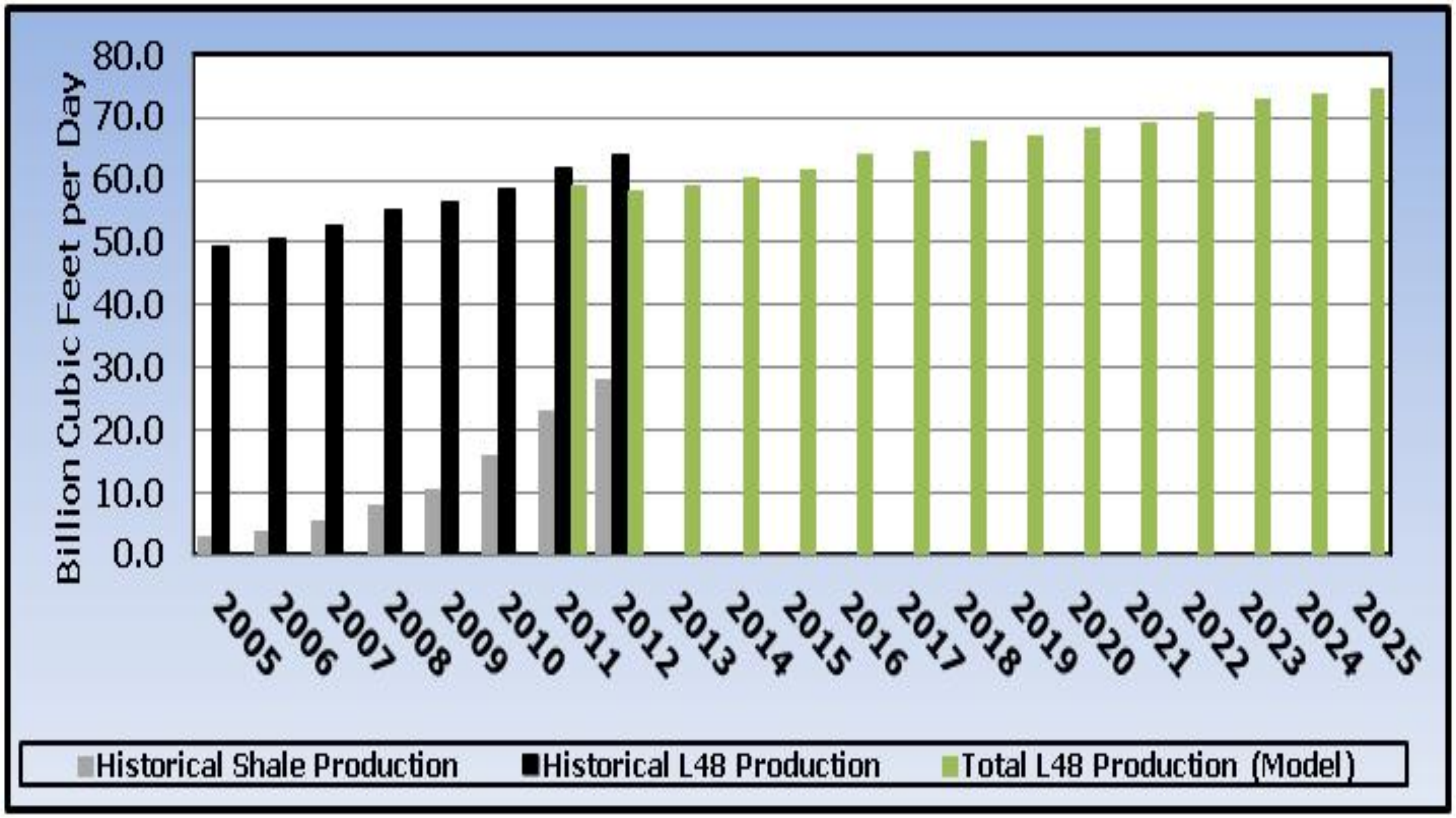


Overall Natural Gas Demand in CA Decreases

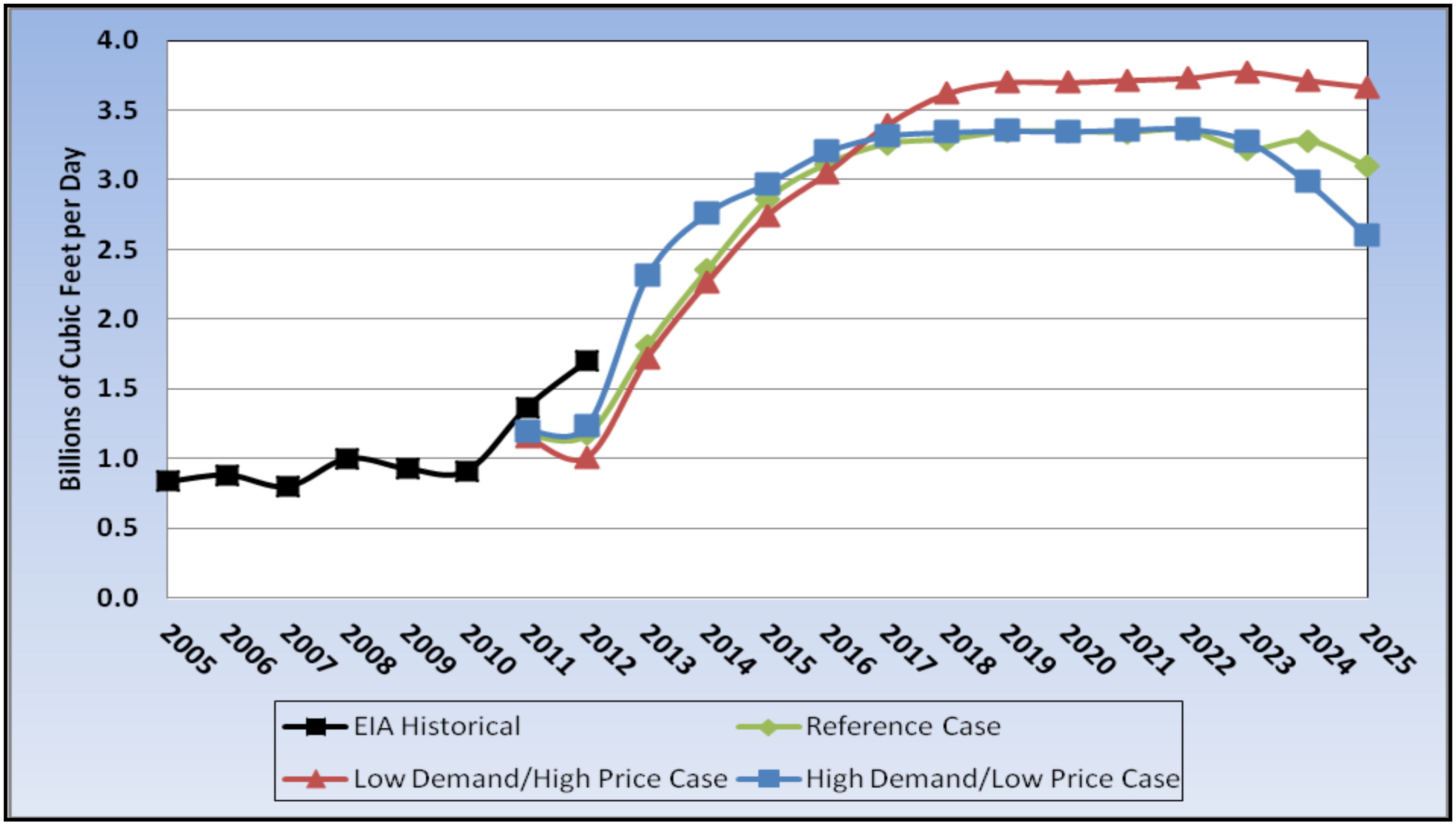


Natural Gas Demand for Power Generation to Decrease in CA

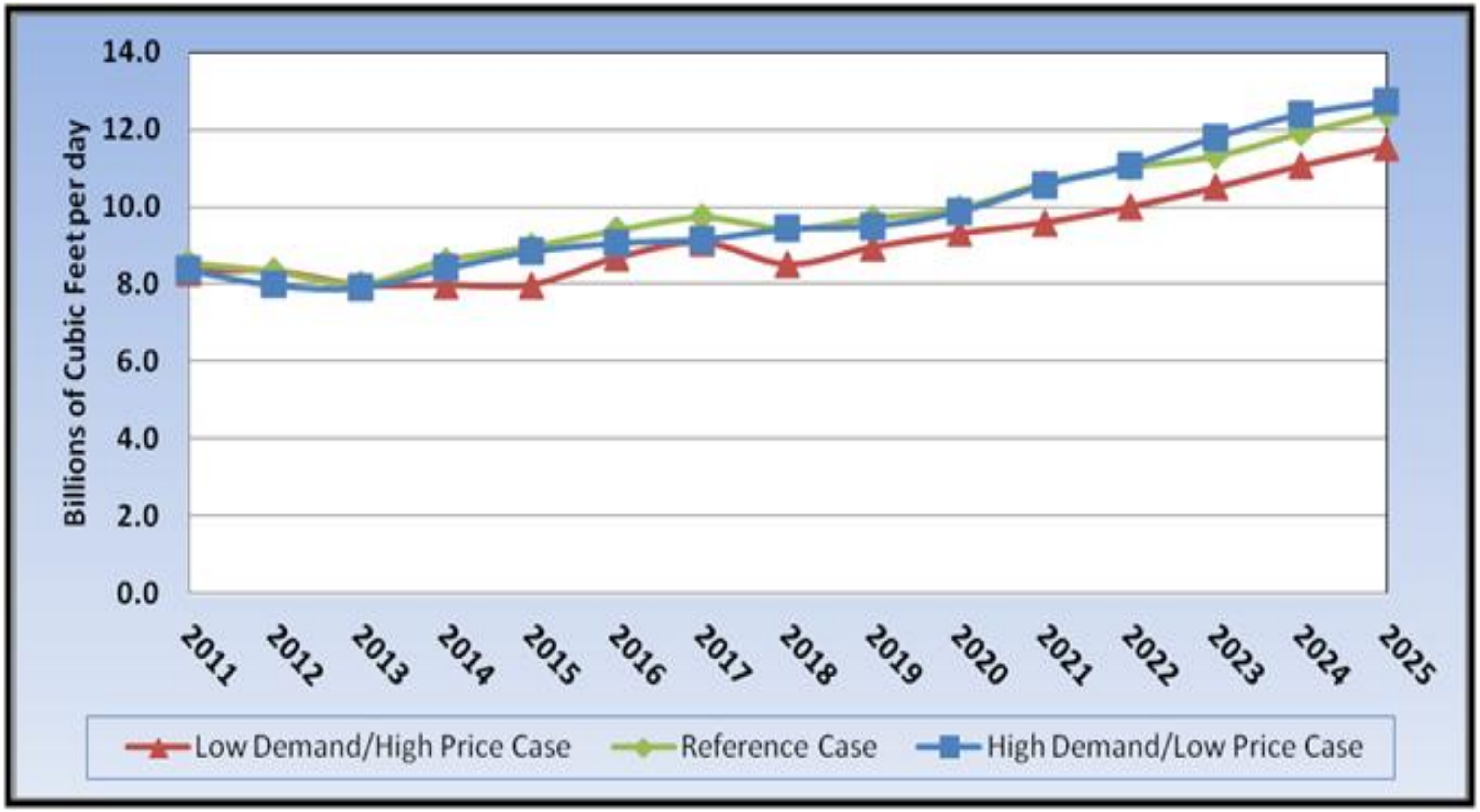
U.S. Natural Gas Supplies Continue to Grow



Exports to Mexico May Plateau Then Decline



Imports From Canada May Increase



Report Findings

- The Renewable Portfolio Standard and aggressive energy efficiency goals reduce NG demand in CA
- Many coal plants likely to be retired in Western Electricity Coordinating Council – which may lead to increased natural gas demand in WECC after 2020
- SONGS closure raised the southern system minimum gas requirements in the San Diego Gas & Electric service area

Questions and Comments

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